Statement of Basis

Permit to Construct No. P-2007.0021
Project ID 61461

Hanson Structural Precast, LLC
Caldwell, Idaho

Facility ID 777-00402

Final

January 6, 2015
Dan Pitman, P.E.
Permit Writer

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01.et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.
FACILITY INFORMATION

Description
The facility is not making any physical or operational changes; the only change is to its name. The process description provided below is without change and is from the March 27, 2007 Statement of Basis which supported issuance of the initial permit.

Eagle Precast Company operates a portable Erie-Strayer central mix concrete plant. The plant’s maximum capacity is 60 cubic yards of concrete per hour (cy/hr), with a normal maximum production of 100,000 cubic yards per year (cy/yr).

Concrete is produced by combining water, cement, sand (fine aggregate) and gravel (coarse aggregate). Supplementary cementing materials, also called mineral admixtures or pozzolan minerals may be added (although not required) to make the concrete mixtures more economical, reduce permeability, increase strength, or influence other concrete properties.

A portable concrete batch plant consists of storage bins or stockpiles for the sand and gravel, storage silos for the cement and cement supplement, weigh bins that weigh each component, conveyors, a water supply, and a control panel. Sand and gravel are either produced on site or purchased elsewhere. Cement and supplementary cementing materials are delivered by truck and pneumatically transferred to the appropriate storage silo. A baghouse or dust collector is mounted above each silo to capture cement or cement supplement as air is displaced in the silo. For this source category, the baghouse is considered primarily as process equipment, with a secondary function as air pollution control equipment. Power to run the facility is provided by the local utility or by a small diesel generator.

After all the storage bins are filled, the production process begins when the sand and gravel are drop-fed into their respective weigh bins. When a pre-determined amount of each is weighed, the aggregate is heavily wetted for better mixing and to minimize fugitive dust prior to being dropped onto a conveyor, which transfers the mixture into either a truck for in-transit mixing or a truck mix drum for mixing onsite. A predetermined amount of cement is also weighed and drop-fed through a chute into the mixer. Water is then added to the truck mix or central mix drum.

Eagle Precast Company uses their concrete almost exclusively for the construction of pre-formed cast materials. The curing and drying process for this operation include a 1.0 MMbtu/hr steam generator, and 2—1.0 MMbtu/hr space heaters; all three of these run on natural gas. Propane is allowed as an emergency back up for the steam generator. Drying practices also involve the use of 10—0.35 MMbtu each, space heaters, (exempt, unregulated heat sources) that run exclusively on propane gas. Eagle Precast uses up to six of these small heaters at one time, in addition to the larger heaters and steam generators.

Permitting History
The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

March 27, 2007 P-2007.0021, Initial Permit, Permit status (S)
February 22, 2011 P-2007.0021, Name Change, Permit Status (S)

Application Scope
This permit action is to change the facility name. Hanson Precast has not proposed any physical or operations changes.
Application Chronology

December 17, 2014    DEQ received an application

TECHNICAL ANALYSIS/ REGULATORY ANALYSIS

The purpose of this permitting action is to change the facility name from Hanson Structural Precast to Hanson Structural Precast LLC.

The technical analysis documented in the previous Statement of Basis on January 21, 2009 does not change and is not repeated in this Statement of Basis.

Similarly, the regulatory analysis does not change as a result of this permitting action and is not repeated in this Statement of Basis.

Permit Conditions Review

This section describes only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action. The purpose of the permitting action simply to change the facility name. However, changes were necessary to the permit to correct inaccuracies/inconsistencies in permit conditions as described below.

Permit Table 2.1

Mention of stack flowrates were removed from the table. Flow rates were referred to as gauge pressure and horsepower input rates which are not flowrates. Additionally, it is not generally DEQ’s procedure to include stack flowrate in the permits table.

Permit Table 2.2

Table 2.2 had specified that the 1.0 MMBtu space heaters are limited to being fired exclusively on natural gas. This description in the table conflicts with permit condition 2.11 which describes the space heaters are fired by propane. The table has been updated to include propane as an available fuel.

Permit Condition 2.6.2

This permit condition described that the permittee shall submit a copy of the O&M manual to the Twin Falls Regional Office but provided the address to the Boise Regional Office. The portable facility’s “home” location is Caldwell in the Boise Region. Accordingly the description of where the O&M manual shall be sent was changed from the Twin Falls Regional Office to the Boise Regional Office.

Permit Condition 2.12

This conditions states that a copy of the Method 9 procedure is attached to the permit as Appendix A. However, the existing permit does not have this attachment. This statement was removed from the permit; it is not DEQ’s procedure to include a copy of the Method 9 procedure in the permit.

The cover page and general provisions of the permit were updated to the current templates. The remainder of the permit is unchanged.

PUBLIC REVIEW

Public Comment Opportunity

Because this permitting action does not authorize an increase in emissions, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04.